



Building Bridges for Energy Code Partnerships



2002 National Workshop on State Building Energy Codes

July 15-18, 2002

**Embassy Suites Hotel Des Moines on the River
Des Moines, Iowa**

July 15, 2002	Pre-Workshop
July 16, 17 and half day July 18, 2002	Main Workshop
July 18, 2002	Post-Workshop

The U.S. Department of Energy is sponsoring the 2002 National Workshop on State Building Energy Codes, with assistance from the Pacific Northwest National Laboratory

Hosted by the Iowa Department of Natural Resources



What You Need to Know



Sponsors

The Workshop is sponsored by the U.S. Department of Energy (DOE) with assistance from the Pacific Northwest National Laboratory and hosted by the Iowa Department of Natural Resources.

What

Attendees include builders, chief code officials, and staff from state energy offices, state code offices, building code commissions, utilities, market transformation organizations, and energy advocacy groups, and others impacted by building energy codes, including building product supplier/manufacturer representatives, utility representatives, architects and engineers, insurance industry policy-makers, and local code officials and code enforcement staff.

Where

The Workshop will be held in Des Moines, Iowa at the Embassy Suites Hotel Des Moines on the River. The Embassy Suites is holding a limited block of guest rooms through **June 28, 2002**, at a special rate of \$67 (*tax not included*) per night. To reserve your guest room contact the Embassy Suites directly at **(515) 244-1700** or the main reservations line at **1-800-362-2779** and request a room at the Hotel Des Moines on the River for the **National Workshop on State Building Energy Codes**.

Attire

Casual

When

The main Workshop begins on Tuesday, July 16th and concludes at noon on Thursday, July 18th. This year's program follows the format of previous workshops except an additional half day has been added to the main Workshop. It includes pre- and post-Workshop activities (*Monday and Thursday*), an evening reception on Monday, opening plenary on Tuesday, a dinner event on Wednesday, exhibitions Tuesday and Wednesday, and a closing plenary on Thursday.

Registration Fee

Full Workshop registration is \$225 which includes all sessions, breaks, lunches (*July 16 and 17*), dinner event, and reception. One-day registrations are also available for \$125 each. Guest participation is available, see the order form.

Exhibitors

The Workshop will feature an exhibit area with displays showcasing the latest in energy-efficient products, code implementation support materials, and more. Exhibit space is still available. Contact **Craig Stark** at **(515) 281-4739** to reserve space.

Resources

In our efforts to conserve resources, the 2002 National Workshop will not make copies of individual presentations available to attendees. All presentations received in advance will be available on CD and distributed to each attendee at the registration table. Presentations will also be available after the Workshop at www.energycodes.gov/news/2002_workshop/presentations.stm

Preliminary Agenda and Schedule



Pre-Workshop

Monday, July 15, 2002

7:00 AM – 6:00 PM

Registration

8:00 AM – 12:00 PM

Building Tours

The tour includes visiting the following three locations:

Iowa Association of Municipal Utilities – Training & Office Complex is a state-of-the-art facility that will help municipal utilities meet the challenges of the 21st century. It is an example of innovative, yet proven techniques for saving energy. The complex was designed to use one-half the energy of a typical code-compliant commercial building and is actually exceeding that goal.

The Energy Resource Station (ERS) is a project of the Iowa Energy Center. Its primary purpose is to provide practical information to building owners, architects, engineers, and building operators on cost-effective, energy-efficient technology for commercial and industrial buildings. The ERS program areas include testing, demonstration, education and training.

Employers Mutual Casualty Insurance Companies (EMC) headquarters is located in downtown Des Moines. This energy-efficient 20-floor office complex received first place in the Excellence and Quality Craftsmanship/Energy Efficient Design Award – Commercial Building from MidAmerican Energy.

12:00 PM – 1:00 PM

Lunch

On Your Own

Sessions/Training

1:00 PM – 1:45 PM

Codes 101 — Code Basics

Mark Halverson, PNNL

Get a brief overview of the U.S. voluntary sector energy standards and model codes process in this great session for those who are new to codes and standards.

1:45 PM – 2:45 PM

ASHRAE 90.1 Training

Mark Halverson, PNNL

An overview of the key provisions in ANSI/ASHRAE/IESNA Standard 90.1 for the commercial building envelope, mechanical, and lighting energy systems. Key differences between Standard 90.1-1989 and Standard 90.1-2001 will be highlighted.

2:45 PM – 3:00 PM

Break

3:00 PM – 4:30 PM

What Will the 2003 International Energy Conservation Code Look Like?

Eric Makela, ICBO

This session will focus on the changes to the 2000 IECC as published in the 2001 and 2002 Supplement to the ICC Codes that will be published in the 2003 IECC. The session will also look at the proposed code changes that were approved during the Spring Code Change Hearings in Pittsburgh, PA. The session will focus on the changes to both the residential and commercial provisions of the IECC including sunspace additions, switching requirements, and changes to the mechanical requirements for commercial buildings.

6:30 PM

Welcoming Reception

This light hors d'oeuvres reception will include complimentary musical entertainment provided by the Des Moines Metro Arts Alliance. Vocalist, D.J. Horrigan, and pianist, Karen Hutzell, will perform a mix of Broadway hits, light jazz and old-time favorites.



Workshop – Day 1

Tuesday, July 16, 2002

7:00 AM – 8:30 AM

Registration

8:30 AM – 9:30 AM

Welcome and Agenda Overview

Sharon Tahtinen

Energy Bureau Chief

Iowa Department of Natural Resources

Mayor Preston A. Daniels *(invited)*

Des Moines, Iowa

Governor Thomas J. Vilsack *(invited)*

State of Iowa

Peter Dreyfuss

U.S. DOE Chicago Regional Office Director

9:30 AM – 10:00 AM

Keynote Speaker

U.S. DOE Representative

10:00 AM – 10:15 AM

Break

Plenary Sessions

10:15 AM – 11:45 AM

Code Jeopardy

Come learn about these topics in a fun and enjoyable spoof of the famous game show Jeopardy: simplifying the code, adopting energy codes from scratch, successful strategies and case studies, and beyond the code.

11:45 AM – 1:00 PM

Box Lunch-Visit Vendor Exhibits

1:00 PM – 1:30 PM

Networking Break

1:30 PM – 3:00 PM

Parade of States

Fast-paced, informative, and whimsical session where a state delegate will give a 2-minute presentation regarding building energy codes activities (greatest code-related success or greatest code-related challenge) in their state. Props, costumes, and visuals are welcome! See enclosed flyer.

3:00 PM – 3:15 PM

Break

3:15 PM – 4:45 PM

Circuit Rider Programs

Successful Circuit Rider Programs promote the adoption, implementation and compliance of building energy codes. Learn more about the Northeast Energy Efficiency Partnership's (NEEP) efforts in Massachusetts – a successful pilot program working with the architect and engineering community in the field to better understand what the Massachusetts code is asking them to do. Iowa's successful Circuit Rider Program is an education process designed from the beginning to the end. Subcommittees work directly with the public through public hearings, local officials, contractors, and code officials, etc. providing knowledge on how to adopt the national codes, understand them better, and changing building techniques. Iowa is also training builders, city management, bankers, realtors, and appraisers in building an energy-efficient community.

4:45 PM – 6:00 PM

Vendor Exhibits – Networking

Dinner/Evening on your own

Workshop – Day 2

Wednesday, July 17, 2002

7:00 AM – 8:30 AM

Registration

8:30 AM – 10:00 AM

Sessions

(choose one)

Session 1A

Ventilation and Moisture Control

This session will examine the effects that mechanical ventilation has on residential buildings and how it can assist in mitigating moisture from the building's interior and envelope, reducing the likelihood of bacterial growth due to moisture. This session will also explore effective ways of providing a mechanical ventilation system while maintaining an energy-efficient building.



Session 1B Data in Defense of Codes

In the battle to adopt energy codes, one good strategy is to estimate what the energy and economic impacts of the proposed code are going to be. But making this estimate can be time-consuming unless a number of basic decisions can be made. This session will focus on the types of information necessary for a thorough energy and economic analysis, with discussion of where some of this information might be obtained and what the consequences of having (or not having) various pieces of information might be. Examples will be drawn from the Building Energy Codes Program's (BECP) State Technical Assistance archives, and audience participation will be solicited for additional insight into how analyses of this type might be performed.

10:00 AM – 10:15 AM
Break

10:15 AM – 11:45 AM
Sessions
(choose one)

Session 2A Indoor Air Quality (IAQ)

Are new building techniques and materials making indoor air quality worse? New research on crawl space moisture, wall moisture and other building components provides new insights for the building construction industry. Leading experts in building science research will present findings and suggest alternatives to building practices that pass code, but do not necessarily result in healthy indoor air.

Session 2B Voluntary Beyond Codes

This session will take a look at energy codes and voluntary programs that encourage builders to go beyond the minimum requirements. It will also explore the strategies for reducing energy use in buildings through innovation and incentives for better performance, and using cost-effective and readily available technologies and practices. This session will focus on **ENERGY STAR** related to Chapter 4 of the IECC, plus other DOE-related programs.

11:45 AM – 1:00 PM
Lunch

Keynote Speaker

Jeffrey R. Vonk (invited)

Director, Iowa Department of Natural Resources

Margo Appel US DOE

Announcing the 2002 Best of Show Award Winners

1:00 PM – 1:30 PM
Networking Break

1:30 PM – 3:00 PM
Sessions
(choose one)

Session 3A Ducts — How Bad? How Important? and How To!

This interactive session will provide updated information on several recent duct leakage studies that examine the energy losses due to duct leakage. In addition, the speakers will describe and present case studies of duct testing and sealing in action, as well as discuss ways to bring ductwork inside in new construction, particularly in affordable homes. They will also open up discussion on how various energy codes specifically address duct leakage problems and look at the potential impact of a statewide duct sealing program to reduce energy use in North Carolina. Finally, the session will demonstrate how energy modeling software rates the importance of duct sealing.

Session 3B Code Enforcement

Residential energy code enforcement can be divided into two halves: plan review (to verify, for example, that proper windows and insulation levels are specified), and on-site inspections (to confirm that materials and equipment are properly installed). The plan review discussion will focus on the tension between codes which are stringent and simple, versus those which are flexible but more complex. Attendees will get a better understanding of the different approaches reflected in the model codes and some homegrown alternatives which can help them make regulatory decisions in their local jurisdictions. The challenges of on-site inspection will be discussed from the building official's perspective: what can an inspector really accomplish given limited time? Successful strategies will be discussed, and inspection tools will be presented for attendees to consider.

3:00 PM – 3:15 PM
Break

3:15 PM – 4:45 PM
Sessions
(choose one)

Session 4A Repeat Session (to be determined)



Session 4B Repeat Session *(to be determined)*

5:30 PM Dinner and Tour Living History Farms

Living History Farms tells the amazing story of how Iowans combined hard work and technology to transform fertile prairies of the Midwest to the most productive farmland in the world. Dinner will be served outdoors picnic style. Travel will be provided.

Comfortable attire is suggested.



Workshop – Day 3 Thursday, July 18, 2002

8:30 AM – 10:00 AM Cracker Barrel

Pick your top three favorite topics and spend 30 minutes exploring each of them. Preliminary examples include: the latest and greatest in energy code compliance/implementation tools; a synopsis of the key differences among the various analysis tools being used; helpful hints on code adoption; and information on the types and forms of code assistance available to states in an atmosphere of reduced Federal funding.

10:00 AM – 10:15 AM Break

10:15 AM – 11:45 AM Sessions *(choose one)*

Session 5A Lighting

This session will provide an overview of current lighting technologies, lighting controls and energy code requirements. Attendees will be exposed to basic lighting terminology and current trends in the lighting industry with a glimpse into the future. Energy codes require lighting be controlled to minimize operation when spaces are vacant or to take advantage of natural daylight. Attendees will learn about the type of control technologies available and their best applications. Come to this session if you want to expand your lighting knowledge and learn about new technologies!

Session 5B Partnering with the Insurance Industry

There are many building energy code issues that are related to the insurance industry. Problems with water damage, mold, ice dams, and IAQ, etc. have caused insurance companies to pay the price. This panel session will examine those issues and identify opportunities for developing partnerships with the insurance industry. The end game is to assist in maximizing state adoption and implementation of energy codes and efficiency programs as well as provide a vehicle to help the insurance industry reduce its loss areas.

11:45 AM – 12:15 PM Closing Plenary and Wrap-Up Jean Boulton U.S. DOE BECP

Post-Workshop Thursday, July 18, 2002

1:30 PM – 4:30 PM Simulation-Based Compliance Methods, What Should DOE be Doing?

The BECP is conducting a number of activities involving simulation-based methods for energy code compliance. Among these activities are the development of the **COMcheck-Plus™** software for commercial buildings and a version of **MECcheck™** with a DOE-2 simulation engine for energy-based tradeoffs. This session is intended to allow you – as a participant of your state's energy code program – to become more familiar with these compliance methods and to express your interests and concerns. The latest versions of the simulation-based software tools will be demonstrated and discussed.



Location

The Embassy Suites Hotel is the only all-suites hotel and conference facility in Iowa and features a tropical atrium with a six-story waterfall. It is within walking distance of downtown shopping and attractions, and is located just 10 minutes from Des Moines International Airport.

Workshop Hotel Accommodations

The Embassy Suites Hotel is holding a limited block of guest rooms at the special Workshop rate of \$67 (*tax not included*) per night. Complimentary cooked-to-order breakfasts are served each morning to all hotel guests. Please contact the hotel by **Friday, June 28, 2002**, to make reservations and receive the special rate. Please inform them you are attending the **National Workshop on State Building Energy Codes** to receive this special Workshop rate. Also, if you desire a non-smoking room, please specify that with your reservations.

The Embassy Suites Hotel:
100 East Locust
Des Moines, IA 50309
Tel: **(515) 244-1700**
Fax: (515) 244-2537
www.embassysuites.com
Toll Free Nationwide Reservations
(800) EMBASSY

Courtesy Shuttle

The Embassy Suites Hotel provides a complimentary shuttle/van from the airport to the hotel. At the airport, call the Embassy Suites on the courtesy phone located near the baggage claim area and request transportation. There is an approximate 10-minute wait.

Driving Directions

From I-35 or I-80 – take I-235 (*either direction*) to 3rd Street exit, drive south on 3rd Street to Locust Street. Turn left on Locust Street to Embassy Suites. **From the airport** – exiting the airport parking lot, turn left onto Fleur Drive, and then turn right onto Locust Street to Embassy Suites. The hotel is 5.5 miles from Des Moines International Airport.

Registration

The full Workshop registration fee is \$225 which includes lunches (*July 16 and 17*), an evening reception, an evening dinner event at the Living History Farms, and pre- and post-Workshop activities shown on the registration form. One-day registrations are also available for \$125 each. Workshop registration can be completed by fax, mail or online. Visit **www.energycodes.gov/news/2002_workshop/registration.stm** to register online or fill out the registration form, complete with credit card information (*back page*), and fax directly to the Iowa Department of Natural Resources at **(515) 281-6794**, attn: Cashier's Office.

Confirmation

You will receive a letter confirming your registration. It will also serve as your receipt. A Des Moines area map will also be included in your confirmation packet. For more information visit **www.SeeDesMoines.com**

Vendor Exhibit Registration

The Workshop will feature an exhibit area with displays showcasing the latest in energy-efficient products, code implementation support materials, and more. Exhibit space is still available, visit **www.energycodes.gov/news/2002_workshop/exh_sponsor.stm**. Contact **Craig Stark** at **(515) 281-4739** to reserve space.

Special Accommodations

Persons requiring special accommodation in accordance with the Americans with Disabilities Act may contact **Diana Hawkins** **(515) 965-3395**. Requests need to be received two weeks prior to the beginning of the Workshop or we cannot guarantee accommodation availability.

Questions

Visit the Workshop website at **www.energycodes.gov/news/2002_workshop** for up-to-date Workshop information. For questions, call **Craig Stark** at **(515) 281-4739**.

Attire

Casual

2002 National Workshop on State Building Energy Codes

Registration Form

Name _____ Title _____

Organization/Business Name _____

Address _____

City _____ State _____ Zip _____

Phone _____ Fax _____ Email _____

Registration

Full Registration \$225.00
One Day Registration \$125.00

Planning to bring a guest?

Reception (*July 15*) \$25.00
Banquet Lunch (*July 17*) \$20.00
Evening Dinner (*July 17*) \$30.00

I am planning to attend the following:

Pre-Workshop

Monday, July 15

- ☐ Building Tours
☐ Evening Reception

Main Workshop

Tuesday, July 16

- ☐ Lunch

Wednesday, July 17

- ☐ Lunch
☐ Evening Dinner Event

Post-Workshop

Thursday, July 18

- ☐ Simulation-Based
Compliance Method,
What Should DOE be Doing?

☐ I prefer vegetarian meals

Method of Payment

☐ Check (*Payable to Iowa Department of Natural Resources*)

☐ MasterCard ☐ Visa Account Number _____

Name on Card _____ Expiration Date _____

Cardholder Signature _____ Total \$ _____

Mail or Fax Your Registration to:

Iowa Department of Natural Resources
Attn: Cashier's Office 06-06 BV, Wallace State Office Building
Des Moines, Iowa 50319
Phone: (515) 281-4739 • FAX: (515) 281-6794

Online Registration:

[www.energycodes.gov/news/
2002_workshop/registration.stm](http://www.energycodes.gov/news/2002_workshop/registration.stm)